DOCUMENT RESUME

ED 333 458 CS 212 904

AUTHOR Hatch, Gary
TITLE Reviving the Rodential Model for Composition: Robert Zoellner's Alternative to Flower and Hayes.
PUB DATE Mar 91
NOTE 13p.; Paper presented at the Annual Meeting of the Conference on College Composition and Communication (42nd, Boston, MA, March 21-23, 1991).
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Processes; Cognitive Psychology; Higher Education; *Models; Research Methodology; *Writing (Composition); Writing Instruction; *Writing Processes
IDENTIFIERS Behavioral Psychology; Cognitive Process Theory of Writing; *Composition Theory; Talk Write Method; Writing Thinking Relationship; *Zoellner (Robert)

ABSTRACT

The time has come to re-evaluate the metaphors used when people think about composition. Such a re-evaluation is under way and may affect composition theory, research models, and classroom practice well into the future. Robert Zoellner rejected the prevailing metaphor for teaching writing which equates the act of thinking with the act of writing. Instead, he proposed a metaphor that treats writing as a form of behavior, and developed a pedagogy based on this theoretical model, finding the "rodential" model of the behavioral psychologists consonant with his assumptions. Linda Flower and John Hayes, on the other hand, based their model on cognitive psychology and artificial intelligence research. The cognitive model classifies writing as a type of problem-solving thinking, and so Flower and Hayes equate writing with thinking. There are a number of reasons for rejecting their metaphor: (1) it is not useful in conducting research, as it defies observation; (2) the think-write metaphor often produces circular reasoning; and (3) treating writing as a type of thinking encourages a simplistic view of signification. The propensity to borrow theories from other disciplines has turned composition studies into a theoretical crazy quilt. For composition studies to become established as a discipline, teachers and researchers must pay more attention to basic theoretical questions, questions about the nature of writing, language, and signification. The first step towards answering these questions lies in rejecting the assumption that writing is thinking, and turning to writing as signifying act. (PRA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED333458

Gary Hatch

Arizona State University

CCCC, March 1991, Boston

Reviving the Rodential Model for Composition: Robert Zoellner's Alternative to Flower and Hayes

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Gary Hatch

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CS212904

Gary Hatch

Arizona State University

CCCC, March 1991, Boston

Reviving the Rodential Model for Composition: Robert Zoellner's Alternative to Flower and Hayes

As a note to Zoellner's lengthy article in College English, Richard Ohmann argues that Zoellner's argument will not be valuable

> if we regard it as establishing still another method or school or approach, in a field already littered with gimmicks, hunches, and personal strategies. Mr. Zoellner questions a deep tacit assumption which he finds behind our pedagogy; he proposes a different set of instrumental concepts. I think it would be healthy for us to meet him on this level . . . . (267n)

Ohmann's statement is prophetic. Many writing teachers still rely heavily on personal experience. Teachers continue to apply a variety of techniques and often, as Sharon Crowley has observed, give little attention to the theoretical compatibility of these techniques (25-26). Furthermore, the "deep tacit assumption" that Zoellner questions in 1969 still prevails in composition theory and pedagogy. Of those who have acknowledged Zoellner's work, few have taken Ohmann's advice that we meet Zoellner on his level. As we near the end of the twentieth century, the time has come to re-evaluate the metaphors we use to think about composition. Such a re-evaluation is under way and may affect composition theory, research models, and classroom practice well into the future. Before turning to the future, however, let us first look back to 1969.

CS218904

There is a danger, when discussing Zoellner's behavioral model for writing instruction, that the discussion will break down into a debate about behavioral psychology itself. Zoellner's adaptation of behavioral psychology certainly deserves the attention of educational psychologists and experts in learning. I, however, am not prepared to join in this debate today. I will sidestep the details of Zoellner's model and focus instead on what I consider to be his greatest contribution: the introduction of a new instrumental metaphor for the teaching of writing.

Zoellner argues that the prevailing metaphor for teaching writing characterizes the written word as thought on paper. Stated in a different way, this metaphor equates the act of thinking with the act of writing (269). Zoellner rejects this metaphor because it ignores certain aspects of the act of writing. In particular, this metaphor does not account for those intelligent, articulate, and vocal students who, for some reason, are not able to manipulate written language in a way that will communicate their thoughts to a reader (271). Zoellner describes confronting these students in his office. He asks them about what they have written, and they open their mouths and say that which they could not express in writing (273).

Those who equate writing with thinking would equate writing problems with thinking problems. The teacher might respond to a student paper as follows: "You need to develop your thoughts"; "Your thinking is too simplistic"; "Your logic is fallacious"; "Give this idea additional thought." We assume that if students

will think clearly, they will naturally write more clearly.

The metaphor Zoellner proposes would treat writing as a form of behavior--as "scribal act"--and would treat the student as an actor. Writing problems result from "maladaptive or faulty behavior" rather than from inadequate preparation or faulty thinking (271). Zoellner does not remove thought altogether from writing. Indeed, he assumes that there exists something within the student that his talk-write pedagogy would let out, first in speech and then in writing. But Zoellner does shift attention away from the student's inner activity, to which the teacher or experimenter has no direct access, to the student's outer activity, which can be observed and measured (289). This observable activity is the manipulation of language itself.

Having set forth his assumptions, Zoellner constructs a theoretical model for writing as scribal act and then develops a pedagogy based on his theoretical model. He finds the "rodential" model of certain behavioral psychologists consonant with his assumptions. The teacher asks students questions about their writing. The students talk about their writing, and the teacher reinforces those vocal behaviors that approximate the act of writing.

Some may argue that Zoellner objects to out-moded product-oriented approaches to writing and that current process-oriented approaches have answered Zoellner's objections. An examination of the instrumental metaphors inherent in current process approaches indicates, however, that the "think-write" metaphor still dominates

composition theory and practice. I take as my example the model for the writing process proposed by Linda Flower and John Hayes. I focus on this model because it is well known and has had a profound influence on composition theory and practice.

Let me preface my criticism of Flower and Hayes by admitting that there is a significant difference between the Flower and Hayes model and the model for writing set forth by those who focus on writing as product. Those who focus on writing as product often view the final written essay as the expression of thoughts already formulated in the writer's mind. A product-oriented approach makes a clear division between content and form. The writing task involves producing the "correct" form with little attention to what steps writers use in producing this form. The product-oriented approach also fails to account for the influence that the writing act itself can have on the writer's thinking.

Flower and Hayes attempt to discover the steps writers use in producing the final essay. They use writers as models for writing processes. Robert Zoellner would have no objection to using writers as models. In fact, he argues that his pedagogy turns each student in the classroom into a model. Teachers model the process for students and students model the process for each other. But Flower and Hayes go beyond examining the outward behavior or scribal acts of writers. They claim that they can discover thinking processes as well.

Flower and Hayes base their model on cognitive psychology and artificial intelligence research at Carnegie-Mellon. This

cognitive model classifies writing as a type of problem-solving thinking. In their article "Problem-Solving Strategies and the Writing Process," Flower and Hayes argue that too much attention has been paid to the writing as product. They choose to focus on "writing as an act of thinking" and the "inner, intellectual process of composing" (449). For them, the act of writing is a "complex cognitive skill" (449). They conclude the article by classifying writing as a type of problem-solving thinking and insist that teachers must view writing as thinking in order to focus on process rather than product. A later article, "Images, Plans, and Prose," shows that Flower and Hayes maintain the assumption that writing is thinking. They begin the article by assuming that writing is thinking and then ask how writers use other methods of knowing to create prose. Flower and Hayes also treat writing problems as thinking problems. Their teaching method consists of teaching students heuristics that will equip them with more problem-solving strategies.

Thus Flower and Hayes base their work on the instrumental metaphor that equates writing with thinking, a metaphor counterproductive to composition research and pedagogy. There are a number of reasons for rejecting this metaphor. First of all, it is not useful in conducting research. As Zoellner observes, the world beneath the skin is private. It defies observation (315). Flower and Hayes argue that they can discover cognitive processes through protocol analysis. The individual gives a verbal description of what is going through his or her mind while engaged

in a problem-solving situation. Flower and Hayes maintain that these protocols reflect the actual cognitive processes of individuals. But protocol analysis does not provide a solution. Any attempt by an individual to describe what is taking place in his or her mind involves signification, the manipulation of signs and symbols. The manipulation of signs is behavior. It is true that the protocol analysis is a vocal rather than a scribal act, but it is still an act of signification. Thus all the researcher can observe is language, sign systems, and the manipulation of sign systems. The mind itself remains closed.

Second, the think-write metaphor often produces circular reasoning. In the Flower and Hayes model, the protocol assumes what it attempts to prove. As I have shown, Flower and Hayes base their research on the assumption that writing is a type of problem-solving thinking. Their results indicate that good writers have a variety of problem solving strategies and that poor writers have "a very limited repertory of thinking techniques" ("Problem-Solving" 451). In other words, good writers are good thinkers because writing is a type of thinking. It should not be surprising Flower and Hayes enjoy such high success in validating their theories because they allow no margin for error. Third, treating writing as a type of thinking encourages a simplistic view of signification. In particular, this metaphor ignores possible problems with combining different sign systems and methods of signification. Flower and Hayes, for instance, see no problem with combining vocal signification with scribal signification in their experimental

method. In "Images, Plans, and Prose," Flower and Hayes justify their use of vocal representations of meaning. They argue that vocal representations of meaning provide a more fruitful area of study and more effective area of focus for teaching (124). In outlining their methodology, they fail to realize that the very use of vocal signification can affect the written text. The representation of meaning vocally is itself a heuristic. Unless the writer in the protocol regularly performs this type of heuristic in preparing an essay, protocol analysis prevents the observer from knowing how expert writers actually compose. The writing prompt itself is an act of signification, as is the set of written instructions or verbal instructions given to the writer participating in the protocol. Flower and Hayes, in suggesting applications for their model, do acknowledge the effect of vocal signification on written signification. They suggest that the protocol method can actually be used as a pedagogical tool to help students improve their own writing. But they fail to see the possible effects of using vocal signification for their experimental method. Zoellner bases his entire method on the assumption that vocal representations of meaning affect written representations. Because students are generally more fluent with speech than they are with writing, Zoellner has his students talk about what they have written. He then transfers the words the students have formed to the written text. Zoellner argues that students will eventually transfer fluency from speech to writing (300-301). If Zoellner is right and speech has a significant

effect on writing, then Flower and Hayes have contaminated their sample.

I am not suggesting that we reject the results recorded by Flower and Hayes and others who do research on cognitive processes in writing. We should, however, reject the assumption that writing is a type of thinking and that we as writing teachers can somehow observe the cognitive processes of our students. We should also reject the concomitant notion that teachers can solve writing problems by teaching their students how to think. Flower and Hayes provide a wealth of valuable data, but the time has come to interpret those data with a new theoretical model.

I propose that we accept Zoellner's instrumental metaphor. Once we adopt the assumption that writing is a form of behavior, we can turn our attention to previous studies, including the studies of Flower and Hayes, and reinterpret their results. "Images, Plans, and Prose," for example, provides valuable information on how writers represent meaning to themselves. This study shows the act of signification and describes how writers can use various sign systems to produce the linguistic structure we recognize as edited prose. We must be careful, however, not to claim that we have represented the thought processes of expert writers. Instead we have studied the writer as actor manipulating sign systems to represent meaning.

Let us meet Zoellner on his level and recreate what he attempted in 1969. First, we reject the think-write metaphor in favor of a metaphor identifying writing with an act of

signification, the manipulation of signs. Then we must construct theoretical models. Zoellner finds his theoretical model in behavioral psychology. Naturally, those with expertise in psychology may wish to update his behavioral model. I suggest, however, that we turn away from psychology to recent work in linguistics and literary theory. The assumptions and methods of these fields are more familiar to those of us trained in English departments, and there has also been a lot of attention in these fields to writing and speech as signifying acts. Finally, we would develop experimental models and teaching methods consonant with these theoretical models.

Some have already begun to re-evaluate the pre-eminence of the think-write metaphor in composition studies. Sharon Crowley, in her book A Teacher's Introduction to Deconstruction, rejects the idea that writing is thought. She argues that telling a student to "say what they think" or "write what they mean" ignores the problematic nature of separating thought from language, content from form, or meaning from expression and of giving primacy to the first term in each opposition (38-39). To Crowley, writing is signification: writing "consists of signifiers, of signs representing signs representing signs, to infinity" (39). As with Zoellner's model, the teacher or researcher can only observe language, sign systems, and acts of signification. Crowley turns to literary theory for her theoretical model. The writings of Derrida and other deconstructionists help her to develop a theory for composition that uses a new instrumental metaphor. Finally,

Crowley suggests the implications of her theoretical model for teaching and research.

Although I find Crowley's work provocative, I am not necessarily suggesting that deconstruction will serve as a model for composition studies in the future. Crowley's work is a model of how such a model should be constructed, however. She repeats Zoellner's act of critiquing the think-write metaphor that permeates most research in composition. She then constructs a pedagogical model based on her theoretical model.

Our propensity to borrow theories from other disciplines has turned composition studies into a theoretical crazy quilt. For composition studies to become established as a discipline, teachers and researchers must pay more attention to basic theoretical questions, questions about the nature of writing, language, and signification. I suggest that a first step towards answering these questions lies in rejecting the assumption that writing is thinking and turning to writing as signifying act.

Works Cited

Crowley, Sharon. A Teacher's Introduction to Deconstruction. Urbana: NCTE, 1989.

Flower, Linda S. and John R. Hayes. "Problem-Solving Strategies and the Writing Process." College English 39 (Dec. 197 7): 449-461.

---, "Images, Plans, and Prose: The Representation of Meaning in Writing." Written Communication 1 (Jan. 1984): 120-160.

Zoellner, Robert "Talk-Write: A Behavioral Pedagogy for Composition." College English 30 (Jan. 1969): 267-320.